ABSTRACT

The invention relates to a bipolar plate, for fuel cells, characterised in comprising a layer of a hydrophobing material which is soluble in a solvent, on the surfaces thereof. Water forms small droplets on the surfaces of the bipolar plate due to said layer, which are loosely held on the surface of the bipolar plate and which can be reliably removed from the fuel cell even with low flow speeds for the operating gases. The thickness of the layer and thus the hydrophobicity thereof and the electrical contact resistance between the bipolar plate and a contacting electrode may be adjusted in a simple manner, by varying the concentration of the hydrophobing material in the solvent.